



ACTUAL & PROJECTED HRS SCORE

Facility Name: Bayonne Barrel and Drum Co.Location: Newark, N. J.EPA Region: II

Person(s) in Charge of the Facility: _____

Name of Reviewer: Ed Haven Date: 10-25-88

General Description of the Facility:

(For example: landfill, surface impoundment, pile, container;
types of hazardous substances; location of the facility;
contamination route of major concern; types of information
needed for rating; agency action, etc.)

Scores: $S_M = 3.86$ ($S_{gw} = 5.89$ $S_{sw} = 3.15$ $S_a = 0$) $S_{FE} =$ $S_{DC} =$

| GROUND WATER ROUTE WORK SHEET | | | | | |
|---|--|-------------|-------|------------|----------------|
| Rating Factor | Assigned Value (Circle One) | Multi-plier | Score | Max. Score | Ref. (Section) |
| 1 Observed Release | 0 45 | 1 | 45 | 45 | 3.1 |
| If observed release is given a score of 45, proceed to line 4 . If observed release is given a score of 0, proceed to line 2 . | | | | | |
| 2 Route Characteristics | | | | | 3.2 |
| Depth to Aquifer of Concern | 0 1 2 3 | 2 | | 6 | |
| Net Precipitation | 0 1 2 3 | 1 | | 3 | |
| Permeability of the Unsaturated Zone | 0 1 2 3 | 1 | | 3 | |
| Physical State | 0 1 2 3 | 1 | | 3 | |
| Total Route Characteristics Score | | | | 15 | |
| 3 Containment | 0 1 2 3 | 1 | | 3 | 3.3 |
| 4 Waste Characteristics | | | | | 3.4 |
| Toxicity/Persistence | 0 3 6 9 12 15 18 | 1 | 18 | 18 | |
| Hazardous Waste Quantity | 0 1 2 3 4 5 6 7 8 | 1 | 7 | 8 | |
| Total Waste Characteristics Score | | | 25 | 26 | |
| 5 Targets | | | | | 3.5 |
| Ground Water Use | 0 1 2 3 | 3 | 3 | 9 | |
| Distance to Nearest Well/Population Served | 0 4 6 8 10 12 16 18 20 24 30 32 35 40 | 1 | 0 | 40 | |
| Total Targets Score | | | 3 | 49 | |
| 6 If line 1 is 45, multiply 1 x 4 x 5 | | | | | |
| If line 1 is 0, multiply 2 x 3 x 4 x 5 | | | 3375 | 57,330 | |
| 7 Divide line 6 by 57,330 and multiply by 100 $S_{gw} = 5.89$ | | | | | |

| SURFACE WATER ROUTE WORK SHEET | | | | | | |
|---|---|-------------|-----------------|------------|----------------|--|
| Rating Factor | Assigned Value (Circle One) | Multi-plier | Score | Max. Score | Ref. (Section) | |
| [1] Observed Release | (0) 45 | 1 | 0 | 45 | 4.1 | |
| If observed release is given a value of 45, proceed to line [4] . If observed release is given a value of 0, proceed to line [2] . | | | | | | |
| [2] Route Characteristics | | | | | 4.2 | |
| Facility Slope and Intervening Terrain | (0) 1 2 3 | 1 | 0 | 3 | | |
| 1-yr. 24-hr. Rainfall | 0 1 (2) 3 | 1 | 2 | 3 | | |
| Distance to Nearest Surface Water | 0 1 (2) 3 | 2 | 4 | 6 | | |
| Physical State | 0 1 2 (3) | 1 | 3 | 3 | | |
| Total Route Characteristics Score | | | 9 | 15 | | |
| [3] Containment | 0 1 2 (3) | 1 | 3 | 3 | 4.3 | |
| [4] Waste Characteristics | | | | | 4.4 | |
| Toxicity/Persistence | 0 3 6 9 12 15 (18) | 1 | 18 | 18 | | |
| Hazardous Waste Quantity | 0 1 2 3 4 5 6 (7) 8 | 1 | 7 | 8 | | |
| Total Waste Characteristics Score | | | 25 | 26 | | |
| [5] Targets | | | | | 4.5 | |
| Surface Water Use | 0 (1) 2 3 | 3 | 3 | 9 | | |
| Distance to a Sensitive Environment | (0) 1 2 3 | 2 | 0 | 6 | | |
| Population Served/Distance to Water Intake Downstream | (0) 4 6 8 10 12 16 18 20 24 30 32 35 40 | 1 | 0 | 40 | | |
| Total Targets Score | | | 3 | 55 | | |
| [6] If line [1] is 45, multiply [1] x [4] x [5] If line [1] is 0, multiply [2] x [3] x [4] x [5] | | | 2025 | 64,350 | | |
| [7] Divide line [6] by 64,350 and multiply by 100 | | | $S_{sw} = 3.15$ | | | |

| AIR ROUTE WORK SHEET | | | | | | |
|---|--------------------------------|-------------|-------|------------|----------------|--|
| Rating Factor | Assigned Value (Circle One) | Multi-plier | Score | Max. Score | Ref. (Section) | |
| 1 Observed Release | 0 45 | 1 | | 45 | 5.1 | |
| Date and Location: | | | | | | |
| Sampling Protocol: | | | | | | |
| If line 1 is 0, the S = 0. Enter on line 5 . If line 1 is 45, then proceed to line 2 . | | | | | | |
| 2 Waste Characteristics | | | | | 5.2 | |
| Reactivity and Incompatibility | 0 1 2 3 | 1 | | 3 | | |
| Toxicity | 0 1 2 3 | 3 | | 9 | | |
| Hazardous Waste Quantity | 0 1 2 3 4 5 6 7 8 | 1 | | 8 | | |
| Total Waste Characteristics Score | | | | 20 | | |
| 3 Targets | | | | | 5.3 | |
| Population Within 4-Mile Radius | { 0 9 12 15 18 21 24 27 30 | 1 | | 30 | | |
| Distance to Sensitive Environment | 0 1 2 3 | 2 | | 6 | | |
| Land Use | 0 1 2 3 | 1 | | 3 | | |
| Total Targets Score | | | | 39 | | |
| 4 Multiply 1 x 2 x 3 | | | | | 35,100 | |
| 5 Divide line 4 by 35,100 and multiply by 100 $S_a =$ | | | | | | |

| | s | s ² |
|--|------|-----------------------|
| Groundwater Route Score (S _{gw}) | 5.89 | 34.69 |
| Surface Water Route Score (S _{sw}) | 3.15 | 9.92 |
| Air Route Score (S _a) | 0 | 0 |
| $S_{gw}^2 + S_{sw}^2 + S_a^2$ | | 44.61 |
| $\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2}$ | | 6.68 |
| $\sqrt{S_{gw}^2 + S_{sw}^2 + S_a^2} / 1.73$ | | S _M = 3.86 |

WORKSHEET FOR COMPUTING S_M